LISTING OF CLAIMS

This claim listing presents the claims as provided in the Examiner's Amendment. All amendments herein are only in relation to the claims as provided in the Examiner's Amendment.

1. (Previously Presented) A method comprising:

associating a security association with a traffic stream;

associating a metric value with the security association;

modifying the metric value based on an amount of network traffic generated for the traffic stream;

dynamically mapping the traffic stream to one of multiple components that perform cryptography operations based on the metric value;

wherein dynamically mapping traffic streams to one of multiple components comprises selecting between performing cryptography operations with a driver agent and performing cryptography operations with a network interface using cached cryptography information; and

wherein the dynamic mapping further comprises replacing a cached security association with a non-cached security association when the metric value of the non-cached security association differs from the metric value of the cached security associations by at least a predetermined amount.

2. (Previously Presented) The method of claim 1 wherein the dynamic mapping is performed using a time-based analysis.

3. (Previously Presented) The method of claim 1 wherein the multiple components comprise a driver agent and a network interface.

4-5. (Canceled)

6. (**Currently Amended**) The method of ~~**claim 5**~~ **claim 1** wherein the predetermined amount is selected based on a cost-based analysis.

7. (Previously Presented) The method of claim 1 wherein modifying the metric value further comprises initializing the metric to a predetermined value when the security association is received by a driver agent.

8. (Previously Presented) The method of claim 1 wherein modifying the metric value further comprises changing the associated metric value by a predetermined amount when the security association is added to a cache.

9. (Previously Presented) The method of claim 1 wherein modifying the metric value further comprises changing the associated metric value when a packet is received.

10. (Previously Presented) The method of claim 1 wherein modifying the metric value further comprises periodically changing the metric value independent of network traffic.

11. (**Currently Amended**) An apparatus comprising:

a network interface of a Network Interface Card coupled to receive network traffic streams; and

a driver agent coupled to communicate with the network interface, the driver agent to associate a security association with a traffic stream, associate a metric value with the security association, modify the metric value of the security association based on how much network traffic is received for the traffic stream, and dynamically map the traffic stream to one of multiple components that perform cryptography operations based on the metric value;

wherein dynamically mapping traffic streams to one of multiple components comprises selecting between performing cryptography operations with a driver agent and performing cryptography operations with a network interface using cached cryptography information; and

wherein the dynamic mapping further comprises replacing a cached security ~~**associations**~~ **association** with a non-cached security association when the metric value of the non-cached security association is greater than the metric value of the cached security association by at least a predetermined amount.

12. (Previously Presented) The apparatus of claim 11 wherein the dynamic mapping is performed using a time-based analysis.

13. (Previously Presented) The apparatus of claim 11 wherein the multiple components comprise a driver agent and a network interface.

14-15. (Canceled)

16. (**Currently Amended**) The apparatus of ~~**claim 15**~~ **claim 11** wherein the predetermined amount is selected based on a cost-based analysis.

17. (Previously Presented) The apparatus of claim 11 wherein modifying the metric value further comprises initializing the metric to a predetermined value when the security association is received by a driver agent.

18. (Previously Presented) The apparatus of claim 11 wherein modifying the metric value further comprises changing the associated metric value by a predetermined amount when the security association is added to a cache.

19. (Previously Presented) The apparatus of claim 11 wherein modifying the metric value further comprises changing the associated metric value when a packet is received.

20. (Previously Presented) The apparatus of claim 11 wherein modifying the metric value further comprises periodically changing the metric value independent of network traffic.

21. (Previously Presented) An article of manufacture comprising a machine-accessible medium with instructions stored thereon to provide machine-readable instructions that, when executed, cause one or more electronic systems to:

associate a security association with a traffic stream;

associate a metric value with the security association;

modify the metric value based on an amount of network traffic generated for the traffic stream;

dynamically map the traffic stream to one of multiple components that perform cryptography operations based on the metric value;

wherein dynamically mapping traffic streams to one of multiple components comprises selecting between performing cryptography operations with a driver agent and performing cryptography operations with a network interface using cached cryptography information; and

wherein the dynamic mapping further comprises replacing a cached security association with a non-cached security association when the metric value of the non-cached security association is greater than the metric value of the cached security association by at least a predetermined amount.

22. (Previously Presented) The article of claim 21 wherein the dynamic mapping is performed using a time-based analysis.

23. (Previously Presented) The article of claim 21 wherein the multiple components comprise a driver agent and a network interface.

24-25. (Canceled)

26. (**Currently Amended**) The article of ~~**claim 25**~~ **claim 21** wherein the predetermined amount is selected based on a cost-based analysis.

27. (Previously Presented) The article of claim 21 wherein modifying the metric value further comprises initializing the metric to a predetermined value when the security association is received by a driver agent.

28. (Previously Presented) The article of claim 21 wherein modifying the metric value further comprises changing the associated metric value by a predetermined amount when the security association is added to a cache.

29. (Previously Presented) The article of claim 21 wherein modifying the metric value further comprises changing the associated metric value when a packet is received.

30. (Previously Presented) The article of claim 21 wherein modifying the metric value further comprises periodically changing the metric value independent of network traffic.

31-40. (Canceled)

41. (Previously Presented) A method comprising:

associating a security association with a traffic stream;

associating a metric value with a security association;

initializing the metric value to a predetermined value when the security association is received by a driver agent, the metric value to be modified based at least in part on traffic generated for the associated traffic stream;

determining whether the security association necessary for performing cryptography operations on a packet of the traffic stream is cached;

determining whether the security association should be cached based on the metric value;

wherein determining whether the security association should be cached further comprises:

increasing the value of the metric value by a predetermined amount when the associated security association is added to a cache;

incrementing the value of the metric value when a packet for the associated traffic stream is received; and

determining whether the metric value is greater than the lowest metric value of cached security associations by at least a predetermined amount.

caching the security association if it is determined from the metric value that the security association should be cached.

42-43. (Canceled)

44. (**Currently Amended**) The method of ~~**claim 43**~~ **claim 41** further comprising periodically decreasing the metric value.

45. (**Currently Amended**) The method of ~~**claim 43**~~ **claim 41** further comprising periodically evaluating the metric value to determine whether the security association should be cached.